Application Programming Interface (API) Help

Function

The Application Programming Interface (API) provides programmatic access to the Chemical Effects in Biological Systems (CEBS) data system. The current version is focused on providing access to summarized findings of exposure factors (e.g., chemicals). More information can be found at the primary CEBS location (https://www.niehs.nih.gov/research/resources/databases/cebs/). This API was developed consistently with the ISA Abstract Model for logical modeling of Investigations, Studies, and Assays specification (http://isa-specs.readthedocs.io/en/latest/isamodel.html).

Making an API request

The API is accessible via HTTP GET requests and does not require a login or API key to use. The base URL for the API is https://manticore.niehs.nih.gov/cebsapi/{version}

A successful request will return a JSON with two top-level elements:

- **metadata**: A JSON Object containing information about the results returned. The metadata fields are:
    - disclaimer: to be moved to API documentation
    - terms: to be moved to API documentation
    - license: to be moved to API documentation
    - api_version: API version requested
    - pagination
        - count: The total number of records matching the query
        - offset: The page number for this result set
        - limit: The number of records returned in a single result set
- **results**: A JSON Array of record objects

If a request is unsuccessful, common HTTP status codes along with an error message (when appropriate). For example:

```
Request: https://manticore.niehs.nih.gov/cebsapi/v1/findings/79-06-1

Response:
HTTP/1.1 404 Not Found
{
   "errors": {
      "message": "Treatments for the given factor were not found",
      "status_code": 404,
   }
}
```

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API Versioning

The API is versioned as it is changed and improved. The versioning process will not break backward compatibility for existing users that can simply specify the desired API version number in the URL of your request:

Browser: https://manticore.niehs.nih.gov/cebsapi/v1/findings/79-06-1

Alternatively, users can specify the desired API version number in the HTTP headers of their request:

curl -v -H "Accept:application/json" -H "api-version:v1"
https://manticore.niehs.nih.gov/cebsapi/findings/79-06-1

If users make a request to the CEBS API URL without a version number, the CEBS API will choose the latest version of the API.

Version 1 is currently the only version of the CEBS API. The CEBS API will be maintained one level back from the current version.

Resources

Endpoint	What it does
/findings/*{id}*	Return a listing of treatment findings for a specific test article

GET /findings/{id}

Parameters

Name	Description
id (*string*) * required	Item's ID. Currently the API only supports formal CASRN numbers.

Sample Response

Request: https://manticore.niehs.nih.gov/cebsapi/v1/findings/105-87-3

```
[
  {
    "metadata": {
      "api_version": "v1",
      "pagination": {
        "count": 16
```

```
     }
   },
   "results": [
    {
      "factor": {
        "id": "105-87-3",
        "type": "CASRN",
        "name": "Geranyl acetate"
      },
      "study": {
        "id": "C54728",
        "name": ""
      },
      "assay": {
        "datasource": "Chronic Bioassay",
        "name": "",
        "extra": "",
        "species": {
          "name": "Rats",
          "sex": "Male"
        },
        "finding": "Negative"
      }
    },
    {
      "factor": {
        "id": "105-87-3",
        "type": "CASRN",
        "name": "Geranyl acetate"
      },
      "study": {
        "id": "C54728",
        "name": ""
      },
      "assay": {
        "datasource": "Chronic Bioassay",
        "name": "",
        "extra": "",
        "species": {
          "name": "Rats",
          "sex": "Female"
        },
        "finding": "Negative"
```

```
      }
    },
    {
     "factor": {
       "id": "105-87-3",
       "type": "CASRN",
       "name": "Geranyl acetate"
     },
     "study": {
       "id": "C54728",
       "name": ""
     },
     "assay": {
       "datasource": "Chronic Bioassay",
       "name": "",
       "extra": "",
       "species": {
         "name": "Mice",
         "sex": "Male"
       },
       "finding": "Negative"
     }
    }

   // ... (further results removed) ...

  ]
 }
]
```

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